Crack-resistant laminated board prodn. for PCB - by immersing substrate in flexible thermoplastic resin compsn. contg. inorganic filler, piling substrates and laminating

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Abstract (Basic): JP 5286093 A

Laminated board is produced by immersing a substrate in a flexible thermoplastic resin compsn. comprising 100 pts. wt. resin and 5-50 pts. wt. of inorganic filler having an av. particle dia. of up to 1 microns and the maximum particle size of up to 2.5 um, by piling a plurality of the substrate and by laminating them.

USE/ADVANTAGE - The laminate board can be bent inside or out side without crack generation. The board can be pref. used for producing printed circuit board. In an example, a flexible unsatd. polyester resin was added by 20 wt.% of Sb203 having an av. particle dia. of 0.9 microns and max. dia. of 1.8 microns. A mixed nonwoven fabric made of glass fibres and polyester fibres and a glass fibre/cloth separately was impregnated by the resin. Two impregnated mixed fabrics were put on both side of impregnated glass fiber cloth and a copper foil was arranged on both out sides of the fabrics and pressed between pair of laminate rolls and heated at 100 deg.C for 20 min. and 160 deg.C for 20 min. to cure in an oven. The laminated board obtd. showed minimal radius of 8 m inside and 7 mm outside on 180 deg. bending without wrinkle generation.

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Title Terms: CRACK; RESISTANCE; LAMINATE; BOARD; PRODUCE; PCB; IMMERSE; SUBSTRATE; FLEXIBLE; THERMOPLASTIC; RESIN; COMPOSITION; CONTAIN; INORGANIC; FILL; PILE; SUBSTRATE; LAMINATE

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